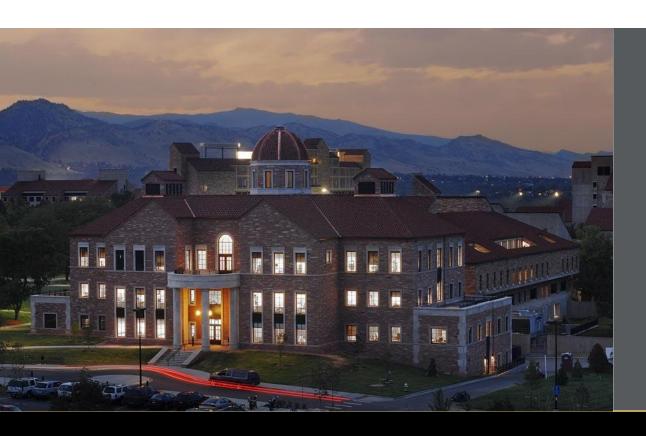
Strategic Action Planning Group on Aging



Robert McNown Brian Lewandowski



Discussion

Overview of Historical Trends: U.S. and Colorado

- Economic Variables
- Demographic Variables

Demonstrate Colorado Economy Model

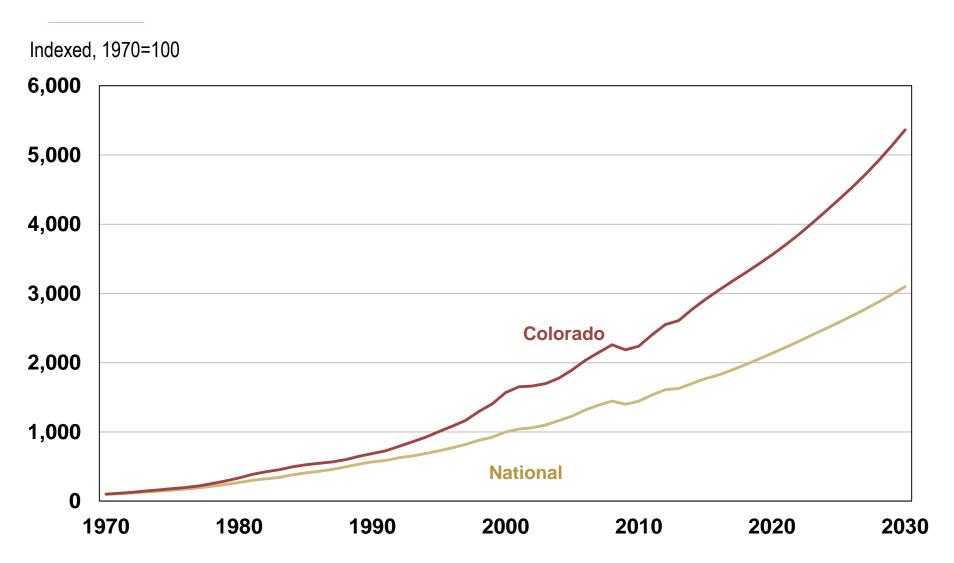
Show effects of alternative demographic assumptions

Preliminary Findings for Further Research

Relationship between aging and the economy

Personal Income Growth

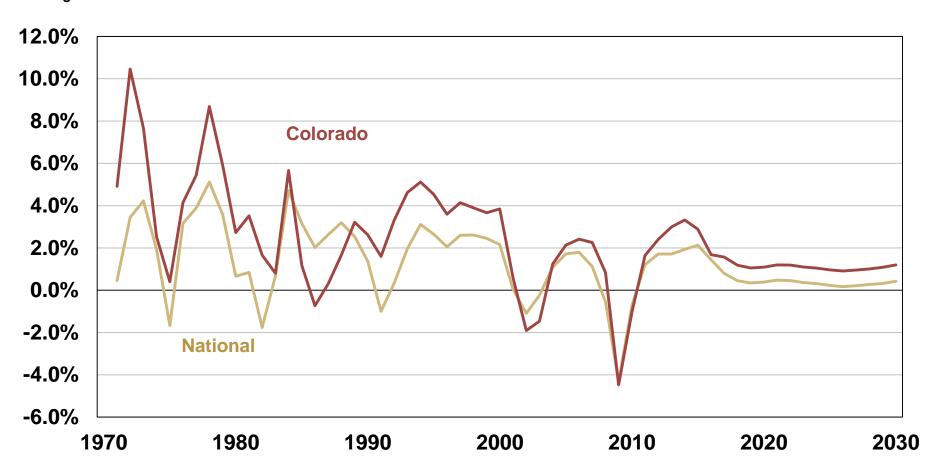
National and Colorado



Employment Growth

National and Colorado

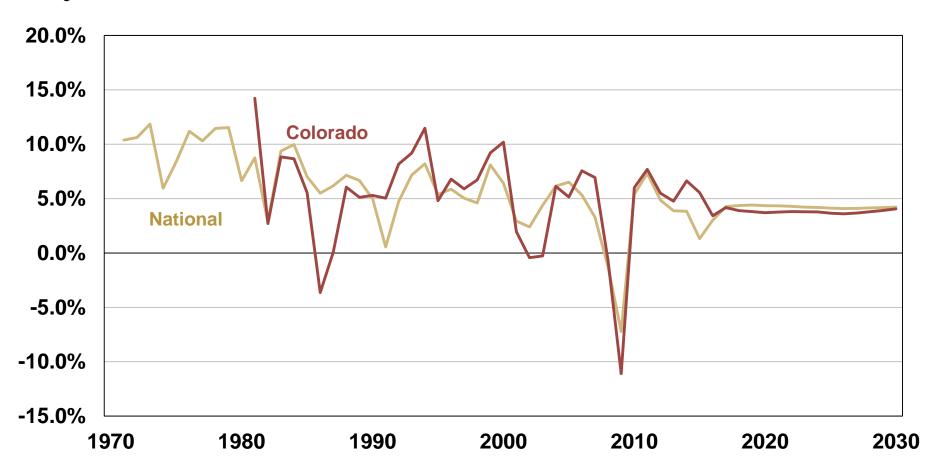
Annual Percentage Change



Retail Trade

National and Colorado

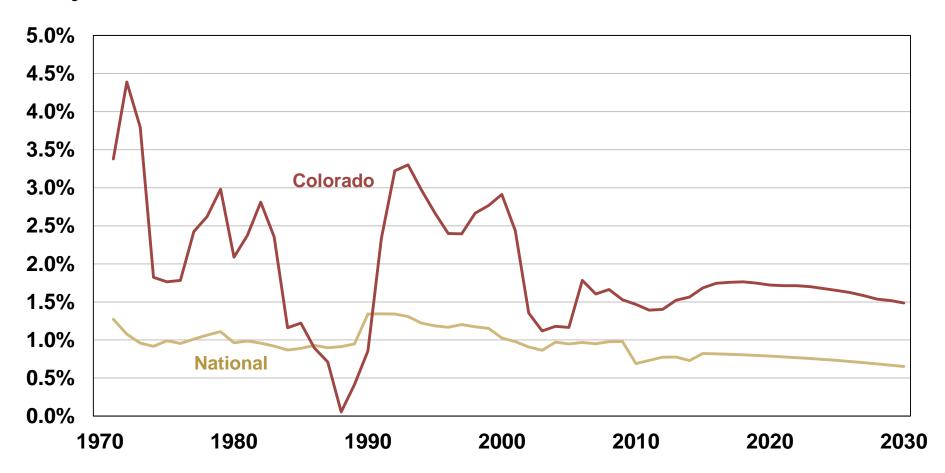
Annual Percentage Change



Total Population

National and Colorado

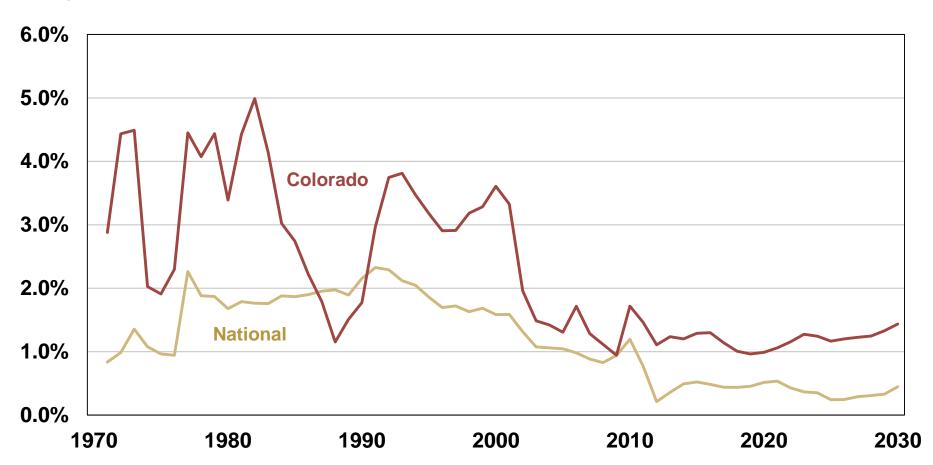
Annual Percentage Change



Population Ages 30-64

National and Colorado

Annual Percentage Change



Demographic effects on macro-economy, tax revenues

Slower growth in working age population => lower employment, output, incomes, expenditures

=>reduced income tax and sales tax collections

Aging population reduces aggregate savings as elderly dis-save:

- ⇒Reduced investment in physical capital, R&D => lower productivity growth
- => lower incomes, expenditures =>
- ⇒Reduced income tax and sales tax revenues

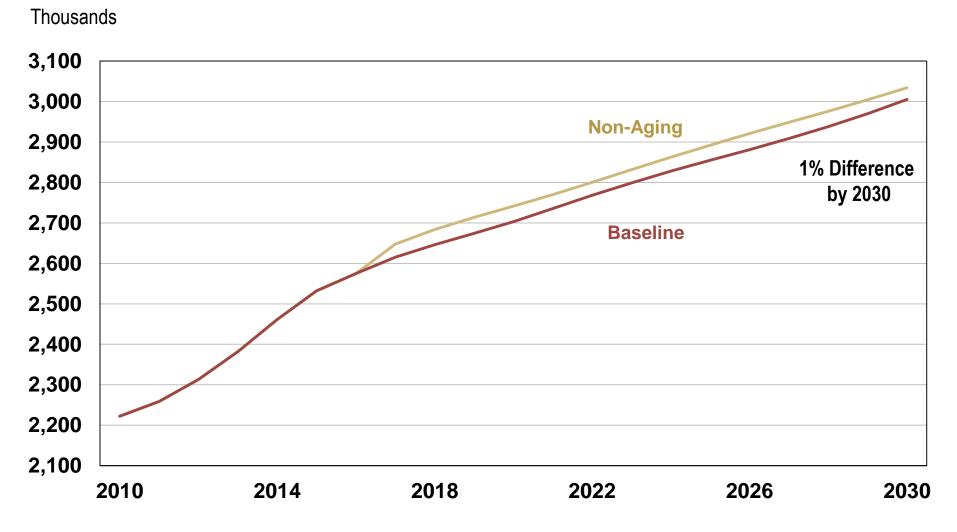
Changing expenditure shares with changing age distribution

- ⇒Elderly spend higher proportion on non-taxable items => reduced sales tax revenues
- ⇒Lower incomes of retired households => lower expenditures => lower income tax and sales tax revenues

Colorado Employment Totals

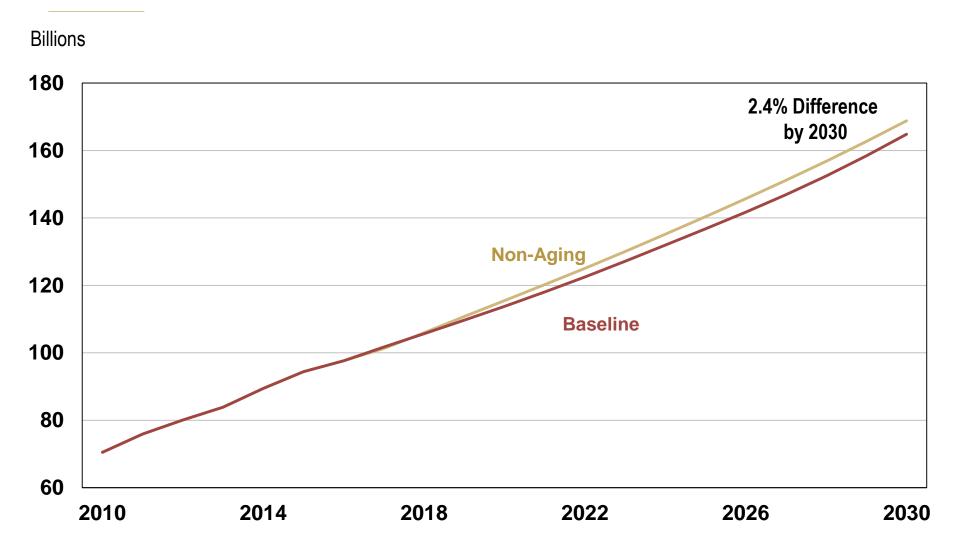
Under Aging and Non-Aging Scenarios





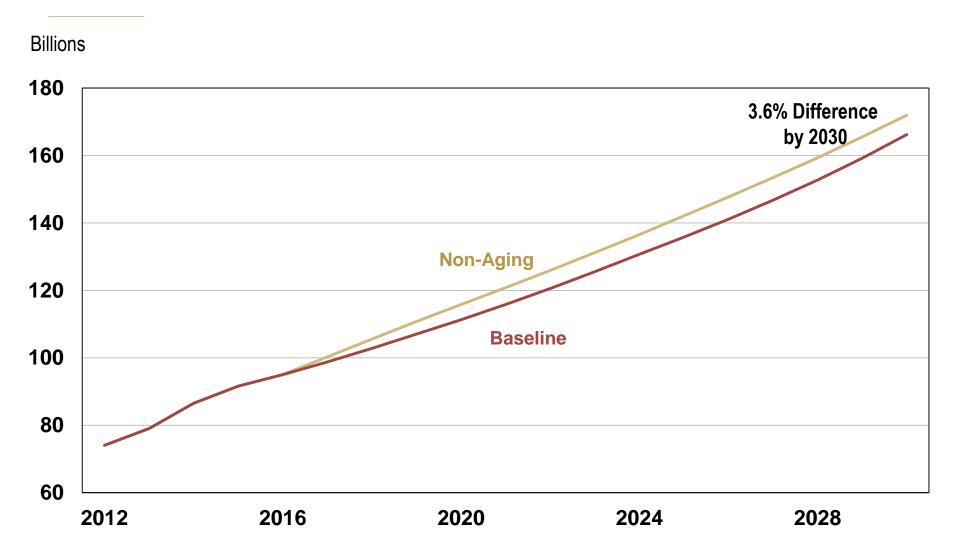
Colorado Retail Trade

Under Aging and Non-Aging Scenarios



Colorado Taxable Sales

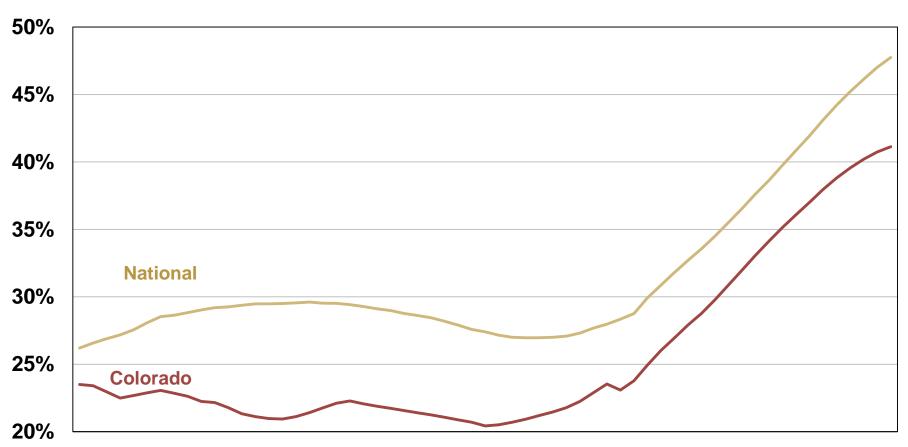
Under Aging and Non-Aging Scenarios



Old-Age Dependency Ratio

Age 65+ as a Percentage of the Population

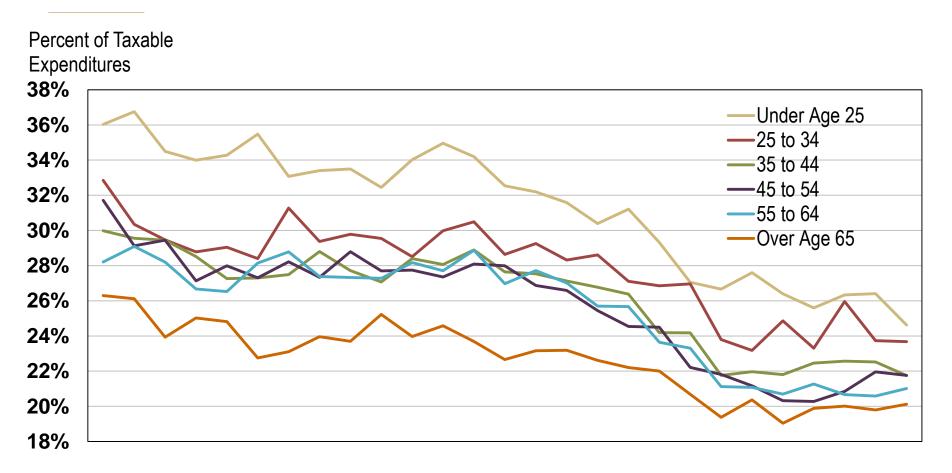
Share of Population



1970 1974 1978 1982 1986 1990 1994 1998 2002 2006 2010 2014 2018 2022 2026 2030

National Consumer Expenditures by Age

Portion of Taxable Expenditures in Colorado

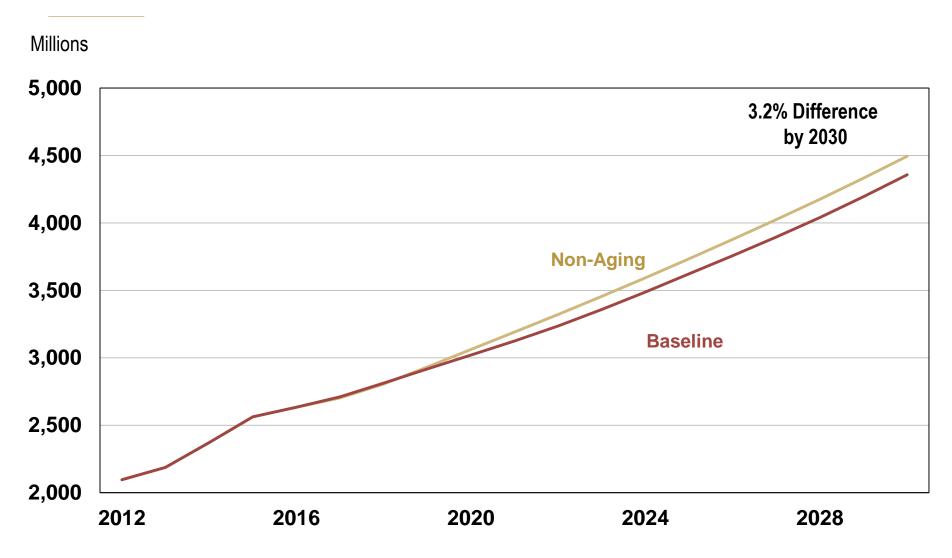


1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014

Source: Based on data from the Bureau of Labor Statistics, Consumer Expenditure Survey, 2004-2014. Calculations based on Colorado Taxable goods and includes Alcoholic Beverages, Apparel and Services, Food Away from Home, Household Furnishings and Equipment, Housekeeping Supplies, Personal Care Products and Services, Reading, Tobacco Products and Smoking Supplies, and Vehicle Purchases (net outlay) divided by Total Average Annual Expenditures

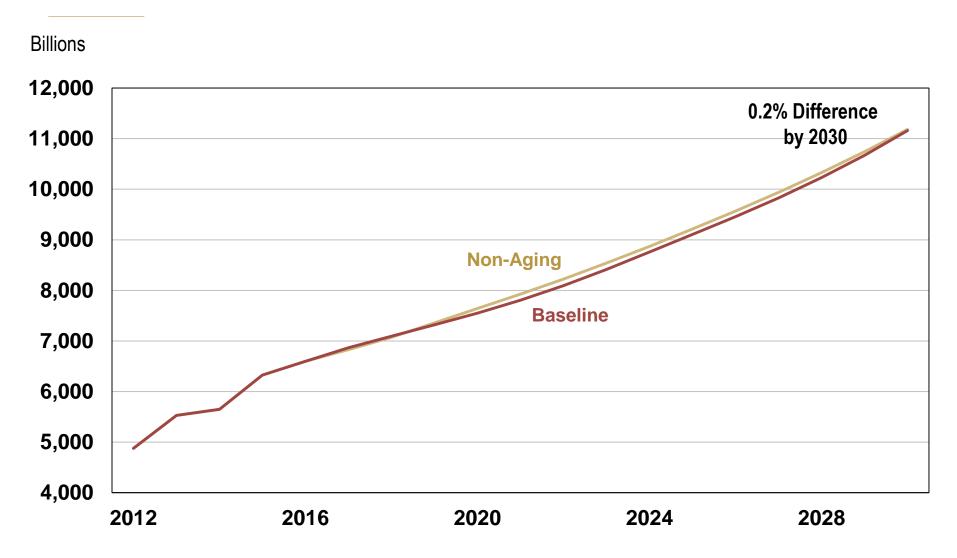
Colorado Sales Taxes

Under Aging and Non-Aging Scenarios



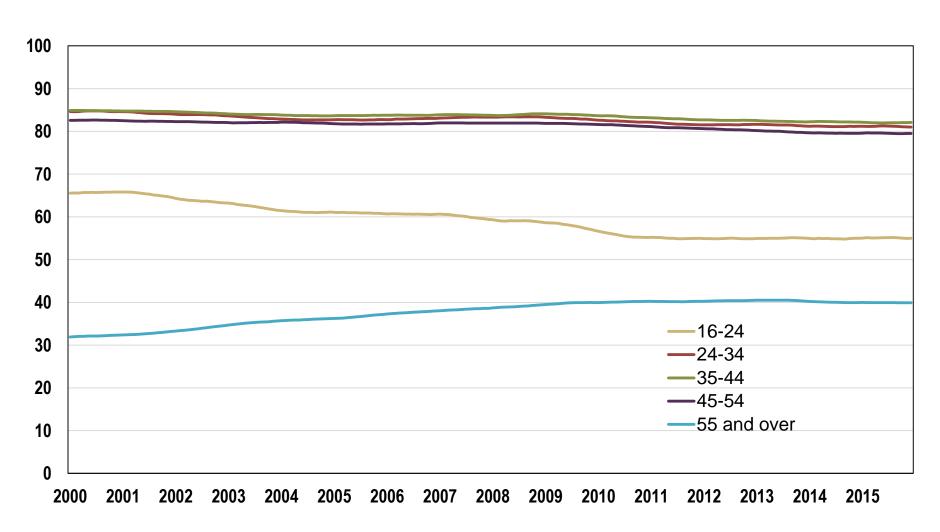
Colorado Income Taxes

Under Aging and Non-Aging Scenarios



Labor Force Participation Rate

National, by Age Cohort, December 2015



Sources: Bureau of Labor Statistics.

Thank You



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